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10/560,403	06/21/2006	James Allan Hudson	07500.0454USWO	5633
23552 7590 07/25/2007 MERCHANT & GOULD PC P.O. BOX 2903 MINNEAPOLIS, MN 55402-0903			EXAMINER PARKER, BRANDON	
			ART UNIT 2174	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/560,403	Applicant(s) HUDSON, JAMES ALLAN	
	Examiner Brandon Parker	Art Unit 2174	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06/21/2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-46 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-46 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12/12/2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>05/08/2006</u> <i>BP</i> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claims 1-46 are presented for examination.

Specification

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: A user interface and method for detecting 2D gestures over a region of the user interface associated with a control element.

The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT.
- (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC.
- (f) BACKGROUND OF THE INVENTION.
 - (1) Field of the Invention.
 - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (g) BRIEF SUMMARY OF THE INVENTION.
- (h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (i) DETAILED DESCRIPTION OF THE INVENTION.
- (j) CLAIM OR CLAIMS (commencing on a separate sheet).
- (k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).

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- (I) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3, 14-19, 23, 26-28, 32, 33, 35-37, 41, 45 and 46 are rejected under 35 U.S.C. 102(b) as being anticipated by Tannenbaum et al (US Patent 5,252,951, hereinafter Tannenbaum).

Regarding claim 1, Tannenbaum discloses a user interface (100 Fig. 1 Drawing) for a display of an electronic device(i.e. CPU),(Col. 6 lines 48-53), the user interface including: a background layer for displaying an interface (i.e. background in the graphical user interface, Col. 18 lines 32-33); and at least a first animated or static control element (302, 304, 306 Fig. 9 Drawing) overlaid on the back ground layer (Col. 18 lines 30-33), wherein the control element (i.e. shape) has a plurality of functions (i.e. action or series of actions) associated with it and each of said functions being executable (i.e. will take place), (Col. 17 lines 62-64) by making a 2D gesture (Fig. 10 Drawing) associated with a one of said plurality of functions (i.e. actions) in a region (i.e.

location/key points Col. 18 lines 50-53) of the user interface (300 Fig. 9 drawing) associated with the control element (302, 304, 306 Fig. 9 Drawing).

Note: Applicant discloses in Par. 0024 a control element can be a character, animation, movement, letter, numerals, shape, symbol or similar of any language.

Claims 32 and 36 are similar in scope to claim 1 and are therefore rejected under similar rationale.

Regarding claim 3, Tannenbaum discloses a user interface as claimed in claim 1, wherein the control element is an icon (Col. 18 lines 40-42).

Regarding claim 14, Tannenbaum discloses a user interface as claimed in claim 1, wherein the user interface includes a plurality of animated control elements (highlighted cells, Col. 20 lines 28-30). Note: Applicant discloses animated control elements help a user distinguish between a control element and background while still rendering the background easily viewable and readable by the user.

Claim 33 is similar in scope to claim 14 and is therefore rejected under similar rationale.

Regarding claim 15, Tannenbaum discloses a user interface as claimed in claim 14, wherein the first control element is of a first type (i.e. alphanumeric characters) and a second of the plurality of control elements is of a second type (i.e. shape/circle, right hand arrow), which is different to the first type (Col. 7 lines 46-50).

Regarding claim 16, Tannenbaum discloses a user interface as claimed in claim 14, wherein the plurality of control elements (i.e. alphanumeric information directly on the screen) between them provide a keyboard (pop-up keyboard, Col. 9 lines 7-12).

Claims 35 and 41 are similar in scope to claim 16 and are therefore rejected under similar rationale.

Regarding claim 17, Tannenbaum discloses a user interface as claimed in claim 16, wherein the keyboard has a standard layout (Col. 6 lines 54-57).

Regarding claim 18, Tannenbaum discloses a user interface as claimed in claim, wherein the keyboard provides all of the characters in an alphabet of a language (alphanumeric keyboard, Col. 6 lines 54-57). It is inherent that an alphanumeric keyboard provides all of the characters in an alphabet of a language.

Regarding claim 19, Tannenbaum discloses a user interface as claimed in claims 16, wherein at least one of the control elements is associated with a plurality of characters and each of the plurality of characters (i.e. alphanumeric characters, Col. 7 lines 46-51) has a respective 2D gesture (i.e. X gesture) associated therewith for causing the character (i.e. X) to be displayed (Col. 10 lines 10-15) on the background layer (Col. 18 lines 32-33).

Claim 37 is similar in scope to claim 19 and is therefore rejected under similar rationale.

Regarding claim 23, Tannenbaum discloses a user interface as claimed in claim 1, wherein the control element is animated so as to be more readily noticeable by peripheral vision (highlighted cell, Col. 20 lines 28-30).

Regarding claim 26, Tannenbaum discloses an electronic device (i.e. computer system) having a user interface (Tannenbaum Claim 1), the electronic device including: a display device (28 Fig. 1 Drawing), a data processing device (20 Fig. 1 Drawing) ,(Col.

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6 lines 40-52); and a memory storing instructions executable by the data processing device (ROM, RAM, Col. 6 lines 48-51) to display the user interface on the display (Col. 6 lines 51 and 52), wherein the user interface is as claimed in claim 1.

Regarding claim 27, Tannenbaum discloses a device as claimed in claim 26, wherein the display is a touch sensitive display (i.e. touch input device, Tannenbaum Claim 16).

Regarding claim 28, Tannenbaum discloses a device as claimed in claim 26, wherein the device further includes a pointer device for making a 2D gesture on the user interface (Col. 6 lines 54-59, Col. 4 lines 44-48).

Regarding claim 45, Tannenbaum discloses computer program code executable by a data processing device to provide the user interface of claim 1 (Col. 13 lines 53-56).

Regarding claim 46, Tannenbaum discloses a computer program product comprising a computer readable medium bearing computer program code as claimed in claim 45 (Col. 6 lines 65-68).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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Claims 2, 4-10, 20, 22, 24, 25, 38-40, and 42-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tannenbaum et al (US Patent 5,252,951, hereinafter Tannenbaum) in view of Agulnick et al (US Patent No. 5,347,295 hereinafter Agulnick).

Regarding claim 2, in addition to claim 1, Tannenbaum discloses a gesture recognition unit which detects gestures from a touch sensor (Col. 10 lines 51-53) wherein windows (i.e. control elements (302, 304, 306, Fig. 9 Drawing) appear on a display but fails to explicitly show the wherein the control element moves over a region of the display. However Agulnick discloses a recognizing means including a means for comparing each gesture to at least one predefined shape (Agulnick Claim 1). Furthermore Agulnick discloses gestures are used throughout the computer's user interface (i.e. over a region of the display) for selecting, moving, copying, deleting, editing, or setting the attributes of object (i.e. control elements, Col. 10 lines 21-26).

It would have been obvious to one of ordinary skill in the art to combine the moving control element as taught by Agulnick with the gesture recognition unit of Tannenbaum to efficiently manipulate objects appearing on a display.

Regarding claim 4, in addition to claim 1, Tannenbaum discloses a character recognition unit which recognizes alphanumeric characters (i.e. control element, Col. 7 lines 46-51) but does not appear to explicitly show an alphanumeric string (i.e. word). However, Agulnick discloses a user interface, wherein the control element is an alphanumeric string (temporarily, Fig. 21. Drawing, Col. 7 lines 44-51).

It would have been obvious to one of ordinary skill in the art at the time of invention to combine the alphanumeric string as taught by Agulnick with the character recognition unit to provide a user friendly and efficient means for associating gestures and objects on a display.

Claim 5, 42, and 43 are similar in scope to claim 4 and is therefore rejected under similar rationale.

Regarding claim 6, in addition to claim 5, Tannenbaum discloses a gesture recognition unit wherein gestures are mapped to a keystroke sequence (Col. 10 lines 49-51) but fails to explicitly show wherein the key sequence is a word that is polysyllabic. However, Agulnick discloses a user interface, wherein the word is polysyllabic (temporarily, Fig. 21 Drawing) and the each individual syllable is animated (word is highlighted, Fig. 22 Drawing).

It would have been obvious to one of ordinary skill in the art at the time of invention to combine the animated polysyllabic word as taught by Agulnick with the gesture recognition unit of Tannenbaum to efficiently aid in targeting objects on a display.

Claim 44 is similar in scope to claim 6 and is therefore rejected under similar rationale.

Regarding claim 7, in addition to claim 1, Tannenbaum discloses MACROS that cut and paste from the edit menu (i.e. control element, Col. 10 lines 24-30) but appears to explicitly teach wherein a control element is a button. However, Agulnick discloses a user interface wherein the control element is a button (i.e. edit button, Fig. 4 Drawing).

It would have been obvious to one skilled in the art at the time of invention to combine the edit button as taught by Agulnick with the MACROS editing feature of Tannenbaum to efficiently save time when selecting control objects.

Regarding claim 8, in addition to claim 7, Tannenbaum discloses a gesture recognition unit is a stroke resembling a circle or arrow (Col. 17 lines 57-62). Furthermore Tannenbaum discloses if a stroke is recognized as one of the gestures in the stored library of shapes, an action or series of actions (i.e. menu of functions) will take place (Col. 17 lines 62-65) but fails to explicitly disclose a menu button bearing an indicia indicating a menu of function. However, Agulnick discloses a user interface, wherein the button (i.e. edit button, Fig. 13 Drawing) bears an indicia indicating a menu of functions (i.e. delete, spell, proof, find, Fig. 13 Drawing) associated with the button (i.e. edit button) and wherein making the 2D gesture (X S P F gestures, Fig. 13 Drawing) executes a function (i.e. delete, spell, proof, find, Fig. 13 Drawing) from the menu (Col. 9 lines 18-22).

It would have been obvious to one skilled in the art at the time of invention to combine menu associated button as taught by Agulnick with the gesture recognition unit of Tannenbaum to effectively learn what gestures are acceptable for different procedures.

Claim 39 and 40 are similar in scope to claim 8 and is therefore rejected under similar rationale.

Regarding claim 9, Tannenbaum discloses a gestural command is effective on words within a document, the text in title bars, and the contents of tabs but fails to show “help functions”. However, Agulnick discloses a user interface as claimed in claim 1, wherein a help function (830 Fig. 36 Drawing) is associated with the control element (i.e. display object) and wherein making a help 2D gesture (i.e. question mark gesture, 820 Fig. 36 Drawing) causes help information (i.e. short summary) relating to the functions (i.e. triggers the display of a floating notebook) associated with the control element (i.e. targeted object) to be displayed in the user interface (Col. 15. lines 65- Col. 16 line 2).

It would have been obvious to one skilled in the art at the time of invention to combine the help function as taught by Agulnick with the gesture commands of Tannenbaum to provide users with quick assistance describing the characteristics of the targeted object.

Claims 10 and 38 are similar in scope to claim 9 and are therefore rejected under similar rationale.

Regarding claim 20, in addition to claim 1, Tannenbaum discloses editing functions (i.e. cut, paste) corresponding to a single gesture (Col. 10 lines 19 –30) but fails to explicitly show a formatting function. However, Agulnick discloses a user interface wherein the control element has a 2D gesture (i.e. check mark gesture) associated with it for carrying out a formatting function (font, size, style, Fig. 24 Drawing) on a character associated with the control element (Col. 13 lines 28-31).

It would have been obvious to one of ordinary skill in the art at the time of invention to combine the formatting function as taught by Agulnick with the editing function of Tannenbaum to time efficiently view and set attributes of an object.

Regarding claim 22, in addition to claim 1, Tannenbaum discloses an interface wherein windows (i.e. displayed object/control elements) appear on the display (302, 304, 306 Fig. 9 Drawing) but fails explicitly show the control element which appears like a three dimensional entity. However, Agulnick discloses a user interface, wherein the control element is animated so as to appear like a three dimensional entity (three-dimensional icons 120 Fig. 72 Drawing).

It would have been obvious to one of ordinary skill in the art at the time of invention to combine the three dimensional entity with the displayed object on the interface of Tannenbaum to enhance the user's view of the objects on the display.

Regarding claim 24, in addition to claim 23, Tannenbaum disclose application windows (i.e. control element) on a display (Fig. 9 Drawing) but fails to show the control element has an axis along which it is animated. However, Agulnick discloses a user interface wherein the control element (i.e. text document with scroll bars) has an axis (464 Fig. 15 Drawing) along which it is animated (470 Fig. 15 Drawing).

It would have been obvious to one of ordinary skill in the art at the time of invention to combine a text document with scroll bars as taught by Agulnick with the display of application windows of Tannenbaum to effectively scroll regions of a display.

Claim 25 is similar in scope to claim 24 and is therefore rejected under similar rationale.

Claims 11,12, 29-31, and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tannenbaum et al (US Patent 5,252,951, hereinafter Tannenbaum) in view of Beaton et al (US Patent No. 6,037,937 hereinafter Beaton).

Regarding claim 11, in addition to claim 1, Tannenbaum discloses a user interface with application windows (i.e. control element) on a display (Fig. 9 Drawing) but does not explicitly show an opaque control element. However, Beaton discloses a user interface as claimed in claim 1, wherein the control element (i.e. control tool) is visually opaque (Beaton Claim 11).

It would have been obvious to one of ordinary skill in the art at the time of invention to combine the opaque control tool as taught by Beaton with the user interface of Tannenbaum effectively view and focus attention on the targeted object.

Regarding claim 12, in addition to claim 1, Tannenbaum discloses a user interface with application windows (i.e. control element) on a display (Fig. 9 Drawing) but fails to disclose a transparent control element. However, Beaton discloses a user interface wherein the control element (i.e. control tool) is visually transparent (virtually transparent, Beaton Claim 10).

It would have been obvious to one of ordinary skill in the art at the time of invention to combine the transparent control element as taught by Beaton with the user

interface of Tannenbaum to efficiently avoid hindering the display of content information in the viewing area of the display.

Claim 34 is similar in scope to claim 12 and is therefore rejected under similar rationale.

Regarding claim 29, in addition to claim 26, Tannenbaum discloses computer system which associates programs with gestures (Tannenbaum Claim 1) but fails to show a device is a handheld device. However, Beaton discloses a device as claimed in claim 26, wherein the device is a handheld device (mobile telephone, Col. 3 lines 22-32).

It would have been obvious to one of ordinary skill in the art at the time of invention to combine the mobile telephone as taught by Beaton with the computer system of Tannenbaum to provide navigation tools that allow small size devices while maximizing the use of available screen real estate.

Claim 30 and 31 are similar in scope to claim 29 and are therefore rejected under similar rationale.

Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tannenbaum et al (US Patent 5,252,951, hereinafter Tannenbaum) in view of Beaton et al (US Patent No. 6,037,937 hereinafter Beaton) and Buxton et al (US Patent 5,798,752 hereinafter Buxton).

Regarding claim 13, in addition to claim 12, Tannenbaum discloses a user interface with application windows (i.e. control element) on a display (Fig. 9 Drawing) but fails to

disclose a transparent control element. However, Beaton discloses a user interface wherein the control element (i.e. control tool) is visually transparent (virtually transparent, Beaton Claim 10) but fails to disclose a transparency of less than substantially 30%. However, Buxton discloses a user interface as claimed in claim 12, wherein the control element (i.e. overlay of icons or text) has a transparency of less than substantially 30% (i.e. some opaque, semi-transparent), (Col. 8 lines 45-52).

It would have been obvious to one of ordinary skill in the art at the time of invention to combine the semi transparent object as taught by Buxton and transparent control tool as taught by Beaton with the user interface of Tannenbaum to efficiently view control objects and the underlying display area.

Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tannenbaum et al (US Patent 5,252,951, hereinafter Tannenbaum) in view of Li et al (US Patent No. 6,639,584 hereinafter Li).

Regarding claim 21, in addition to claim 1, Tannenbaum discloses gesture recognition unit wherein an object has a corresponding action or series of action (i.e. functions, Col. 17 lines 62-64) but does not explicitly show the control element is associated with a plurality of media play function. However, Li discloses a user interface as claimed in claim 1, wherein at least one control elements is associated with a plurality of media player functions (i.e. play, pause, stop, skip song, Col. 5 lines 40-66) and each of the

media player functions (Col. 5 lines 35-40) has a respective 2D gesture (110, Fig. 2 A Drawing) associated therewith for causing the media player function to be executed (i.e. start playing a song), (Col. 5 lines 43-51).

It would have been obvious to one of ordinary skill in the art at the time of invention to combine the media player functions as taught by Li with gesture recognition unit of Tannenbaum to enhance the user's flexibility of control objects with minimal amount of difficulty.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure which relate to a determining template icons for document applications.

US Patent 5564005 discloses an interactive system for producing, storing, and retrieving information correlated with a recording of an event.

US Patent 5764218 discloses a method and apparatus for contacting a touch sensitive cursor-controlling input device to generate button values.

US Patent 5796406 discloses a gesture based input information processing apparatus.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brandon Parker whose telephone number is 571-270-1302. The examiner can normally be reached on Monday thru Friday 7:30am - 5:00pm.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kristine Kincaid can be reached 571-272-4063. The fax phone number for the organization where this application or proceeding is assigned is 571-270-2302.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

BP
07/11/2007



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